

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

QUAD/TECH, INC.	:	CIVIL ACTION
	:	NO. 09-2561
	:	
Plaintiff,	:	
	:	
v.	:	
	:	
	:	
Q.I. PRESS CONTROLS B.V.,	:	
et. al,	:	
	:	
Defendants.	:	

M E M O R A N D U M

EDUARDO C. ROBRENO, J.

APRIL 1, 2010

I. INTRODUCTION

At issue in this litigation is a patent licensed to Plaintiff Quad/Tech, Inc. ("Quad/Tech"), for a printing registration control system used with newspaper and commercial printing presses. Quad/Tech alleges that Defendants Q.I. Press Controls, B.V. ("Q.I., B.V."), Q.I. Press Controls North America, LTD., Inc. ("Q.I. N.A.") or (collectively, "Q.I. Defendants"), and Print2Finish, LLC ("Print2Finish") (collectively, "Defendants"), designed, marketed, and sold a competing product - the mRC System that infringes upon its patent.

Presently before the Court is Quad/Tech's Motion for Preliminary Injunction. (Doc. no. 8.) Because it has failed to demonstrate either a reasonable likelihood of success on the merits as to its claim of infringement or irreparable harm,

Quad/Tech's Motion for Preliminary Injunction will be denied.

II. BACKGROUND

Quad/Tech filed the instant action against Defendants alleging the following claims: (1) infringement of claims of the "577 Patent," in violation of 35 U.S.C. § 271; (2) unfair competition under the Lanham Act, in violation of 15 U.S.C. § 1125(a); (3) tortious interference with prospective contractual relationships; (4) Pennsylvania unfair competition.¹ In addition, Q.I. Defendants filed two counterclaims that seek a declaratory judgment of: (1) non-infringement of the '577 Patent; and (2) invalidity of the '577 Patent.

Quad/Tech has filed a motion for preliminary injunction. (Doc. no. 8). The Court held a hearing on the motion and preliminary claim construction. Afterwards, the parties filed post-hearing briefs and proposed findings of fact and conclusions of law. (Docs. no. 85, 89 and 90.) The motion is now ripe for disposition.

A. Quad/Tech Background

Quad/Tech is a wholly-owned subsidiary of Quad/Graphics. Since its inception in 1971, Quad/Graphics has become the largest privately-held printer company in the country.

¹ These claims were amended following the Court's order on September 8, 2009.

Quad/Tech specializes in the development, design, market, and sale of printing presses. Quad/Tech's products are used in commercial printing, newspaper printing, and packaging printing. Quad/Tech's core products are color registration systems. In the development of these systems, Quad/Tech has filed approximately 234 patent applications in the United States and abroad.

The '577 Patent is at issue in this case. The technology of this patent operates to ensure that colors of ink are properly and precisely placed on a "web" of paper. To understand the 577 Patent, a brief discussion of the commercial color printing process is necessary.

1. Color Printing Process

Four inks are used to print full-color images ("four-color-process printing"). The four inks include three primary colors (cyan, magenta, and yellow) and black; these colors are abbreviated as CMYK. Using the CMYK method, countless colors are reproduced by various application of the color dots on the surface (paper or other medium) to be printed; the surface is often referred to as the "web."²

To reproduce colors accurately, the ink dots must be precisely placed on the web. This placement process is referred to as "registration." Conversely, when the ink spots are not

² For example, placing dots of cyan (bright blue) ink and yellow ink in close proximity will reproduce the color green.

properly aligned, it is referred to as "misregistration."

Various technologies have developed to ensure that color registration occurs properly. One method is to place small marks ("registration marks") of various colors in various positions on the web; printed systems using this method are referred to as "marked" systems, and are said to operate in "marked mode". Registration marks are commonly placed on the margins of the web, distinct from the image itself. Color registration systems which operate without registration marks on the web are referred to as "markless systems," and are said to operate in "markless mode."

2. '577 Patent

Quad/Tech developed a printing color registration system which can be used in both "marked" and "markless" mode. On October 28, 1992, Quad/Tech filed with the United States Patent and Trademark Office ("PTO"), United States Patent Application Serial No. 07/967,978, in the names of Jeffrey W. Sainio and John C. Seymour, and entitled, "Color Registration System for A Printing Press." The PTO allowed the claim without amendment. Quad/Tech filed the same patent application in Germany, and other countries, which led to the issuance of European Patent No. 0 598 490 and German patent DE 693 17 625.

On May 2, 1995, the PTO issued the '577 Patent entitled Color Registration Systems For a Printing Press, based upon the '978 Application (hereinafter, "'577 Patent"). Quad/Tech claims

the '577 Patent discloses the first system that can function in both marked and markless modes, based upon data and information about the image being printed that can be obtained from pre-print data or information. Defendants argue the '577 Patent only discloses and cover a color registration control system that operates in markless mode with any registration marks. The '577 Patent does not contain the terms "marked" or "markless". It is undisputed that Quad/Tech does not have a product available that implements Claim 29³ of the '577 Patent into a marketed product.

³ '577 Patent Claim 29 reads:

A system for general a signal representative of color registration offset between at least first and second colors of an image printed on a webs, where a first printing unit prints the first color of the image and a second printing unit prints the second color of the image, the system comprising of:

A: a memory disposed to store a first reference array of digital data representative of the first color of at least a portion of the image and a second reference array of digital data representative of the second color of the portion;

B: an imaging device in optical communication with the web to produce a first analog signal representative of the first color of the portion of the image and a second analog signal representative of the second color of the portion;

C: a converter circuit, operatively associated with the imaging device and memory, which converts the first analog signal to a first color array of a digital data, and converts the second analog signal to a second color array of digital data, where the first and second color arrays are stored in the memory; and

D: a processing circuit in communication with the converter circuit and the memory, where the processing circuit compares the first reference array with the second color array to determine a registration offset between the first and second colors and produces

B. Q.I. and Print2Finish Background

_____ In 1996, four years after the '577 Patent was filed with the PTO, Q.I. B.V. was created by two former Quad/Tech Europe employees, Menno Jansen and Erik Van Holten. According to Plaintiff, while Jansen and Van Holten were still employed at Quad/Tech, they started Q.I. B.V. and solicited Quad/Tech employees in the United States and Europe. Upon learning this information, Quad/Tech immediately terminated Jansen and Van Holten and instructed them to turn in their computers.

Print2Finish is a manufacturer's representative based in Yardley, Pennsylvania. Print2Finish represents a number of European companies in the printing business and earns commission for sales of components used in the printing industry. By Print2Finish's admission, it represents the Q.I. Defendants and offers for sale the mRC registration system (hereinafter, "mRC system").⁴

C. German Action

In April 2008, Q.I. began to offer for sale its mRC system. According to Plaintiff, Q.I. advertise that the mRC

a signal representative the registration offset between the colors.

⁴ Defendants note that there are many QIPC products that used the mRC acronym that are not "markless registration systems." They claim that mRC is an umbrella term for a line of print control products that have multiple functionalities. The mRC+™ is the only system at issue in this case.

system can be used in both marked and markless modes. When Quad/Tech learned that Q.I. was offering this system for sale, Quad/Tech sought a preliminary injunction against Q.I.B.V. in Germany. Plaintiff contends that the German patent and '577 Patent are based upon the exact same application with virtually identical claims.

In the German action, Plaintiff asserted infringement of the German version of the '577 Patent. In response, Q.I.B.V. raised various defenses including validity and Q.I.'s infringement. The parties briefed the issues and the German court held a full evidentiary hearing. Following the hearing, the German court enjoined Q.I.B.V. from infringing the claims of Quad/Tech's European and German patents. The German appellate court upheld the decision and affirmed the injunction. In January 2009, Q.I. accepted the decision of the German court and terminated the proceeding.⁵

D. Patent Action in this Case_____

_____According to Plaintiff, Defendants are offering the mRC system for sale in the United States. Plaintiff alleges that the mRC system infringes upon Claim 29 of the '577 Patent, as it is

⁵ Plaintiff points out that Q.I. could have appealed the decision of the German court, but opted not to do so. Plaintiff contends that Q.I.'s acceptance of the decision converted the preliminary injunction into a permanent injunction.

available to operate in both marked and markless modes.⁶ Q.I. contends that the mRC system does not infringe upon Plaintiff's patent because it does not share any claims with the '577 Patent, and cannot operate in markless mode.

Defendants describe the mRC System as a calibration system for checking whether separate colors (typically, cyan, magenta, yellow, and black) are properly aligned with respect to each other when printed on paper by a printing system. If the colors are not properly aligned, the printed work will appear out of focus. Importantly, the mRC System measures whether colors are properly aligned by measuring small registration marks ("micro marks") printed in a predefined pattern next to or preceding the actual printed work, but completely distinct from the printed work itself. Defendants highlight that the mRC System sold in the United States has no ability to perform color registration by optimally scanning the actual printed image or work. The mRC System is patented in the United States under U.S. Patent No. 6,108,436, which is owned by Q.I.B.V.

Defendants contend that the mRC System does not

⁶ Plaintiff concedes that Q.I. advertises on its webpage that the mRC system is not available in the United States in markless mode. However, Plaintiff argues that this representation is belied by Q.I.'s press releases and various advertisements in the trade press which do not limit the functionality of the mRC system. Defendants argue there were no sales or offers for sale of the markless mRC system in the United States.

infringe upon Claim 29 of the '577 Patent because the technologies are materially different. Specifically, the "fundamental and material difference between mRC System and the ['577 Patent] is that all limitations of Claim 29 (contained in the '577 Patent) require a system configured to perform color registration based only upon the image (i.e., the actual printed work such as a scene or picture) printed on a paper by a print system." In contrast, "the mRC System measures whether colors are properly aligned by a print system on a paper by measuring small registration markets printed in a predetermined pattern distinct from (i.e. next to or preceding) the actual printed image or work, but nowhere on the printed image itself." Defendants contend that the use of registration marks distinct from the actual printed image is a well-known prior art technique dating back decades.

III. DISCUSSION

A. Standard for a Preliminary Injunction

District courts are authorized to grant injunctions in order to prevent the infringement of patent rights. See 35 U.S.C. § 283. The moving party is entitled to a preliminary injunction if it establishes: (1) a reasonable likelihood of success on the merits; (2) irreparable harm if an injunction is not granted; (3) a balance of hardships tipping in its favor; and (4) the

injunction's favorable impact on the public interest. Amazon.com, Inc. v. Barnesandnoble.com, Inc., 239 F.3d 1343, 1350 (Fed. Cir. 2001).

No single factor is dispositive; “rather, the district court must weigh and measure each factor against the other factors and against the form and magnitude of the relief requested.” Id. (quoting Hybritech Inc. v. Abbott Labs., 849 F.2d 1446, 1451 (Fed. Cir. 1988)). Nevertheless, “a movant cannot be granted a preliminary injunction unless it establishes both of the first two factors, i.e., likelihood of success on the merits and irreparable harm.” Id. (citing Vehicular Techs. Corp. v. Titan Wheel Int'l, Inc., 141 F.3d 1084, 1088 (Fed. Cir. 1998)).

B. Reasonable Likelihood of Success on the Merits

Quad/Tech, as the moving party, has the burden to demonstrate a reasonable likelihood of success on the merits as to its allegation that the mRC System infringes upon Claim 29 of the '577 Patent. In order to make this showing, Quad/Tech must present proof that (1) the '577 Patent is valid, and (2) Defendants infringed the '577 Patent. Pfizer, Inc. v. Teva Pharms., USA, Inc., 429 F.3d 1364, 1372 (Fed. Cir. 2005).

In resolving Quad/Tech's Motion for Preliminary Injunction, the Court has assumed, without deciding, that the

'577 Patent is valid and enforceable. The Court's analysis, therefore, is confined to the narrow issue of whether the mRC system infringes the '577 Patent. This determination consists of two steps: (1) construing the claim at issue, and (2) comparing the properly construed claim to the allegedly infringing product. Playtex Prods., Inc. v. Procter & Gamble Co., 400 F.3d 901, 905-06 (Fed. Cir. 2005). "To prove infringement, [Quad/Tech] must show that [the mRC System] meets each claim limitation, either literally or under the doctrine of equivalents." Id. at 906 (emphasis added).

Quad/Tech contends that the mRC System infringes Claim 29 of the '577 Patent. Defendants deny infringement, asserting that at least two elements⁷ of Claim 29 are absent from the mRC System. First, Defendants argue that the mRC System does not contain the "imaging device" outlined in the '577 Patent. Defendants assert that a person of ordinary skill in the art would understand that the term "imaging device" of Claim 29 means either (1) one color camera, or (b) multiple black and white (i.e., monochrome) cameras, each fitted with a different filter to produce signals representative of different colors from the portion of the image optically observed. (Defs.' Proposed Findings of Fact, doc. no. 89, ¶ 124.) Defendants argue that the

⁷ The parties, during the oral argument on preliminary claim construction, contested at least ten different terms of Claim 29. However, in post trial briefs, the parties primarily focused on the terms "image" and "imaging device". As described infra, the Court need not analyze or construe all of the disputed terms.

mRC system operates with one black and white camera (without camera filters) and cannot read or see color. (Id. at ¶ 168.) Thus, they argue the mRC System differs substantially from the '577 patent because the mRC System cannot read color, and therefore cannot "compare a first reference array and second reference array with the second and first color arrays," an essential element of the '577 patent. (Id. at ¶¶ 171, 196.)

Defendants allege that because the mRC System does not contain the "imaging device" of the '577 Patent that can produce two analog signals, it is also missing the "converter circuit" and "processing circuit" required by Claim 29 to process certain necessary data points. (Id. at ¶¶ 200.) As a result, Defendants argue, the mRC System cannot store "arrays" of the missing digital data points that represent different colors and has no corresponding memory to store "arrays" of such values. Thus, they claim that all pertinent elements of Claim 29 are missing from the mRC System. (Id. at ¶ 203.)

Second, Defendants argue that the mRC system sold in the United States cannot operate in "markless" mode. In this respect, the system operates by measuring the distances between the printed registration and reference marks distinct from the actual printed image. (Id. at ¶¶ 159, 160, 166.) Defendants argue that the '577 Patent disparages and disavows prior-art systems that operate with registration marks. Moreover,

Defendants argue that Claim 29 does not cover a system that relies on registration marks, but only a "markless" mode that relies on the actual printed image itself.

For the reasons that follow, the Court concludes that Plaintiff has not shown that the mRC system infringes Claim 29 because the term "image" in the '577 patent means the actual-printed image excluding registration marks.⁸

1. Claim Construction Principles

As the Supreme Court observed in Markman v. Westview Instruments, Inc., "[v]ictory in an infringement suit requires a finding that the patent claim covers the alleged infringer's product or process, which in turn necessitates a determination of what the words in the claim mean." 517 U.S. 370, 374 (1996) (internal quotation and citation omitted). In determining the scope of a claim, the Court is to consider the language of the claim itself, the written specification contained in the patent document, and the patent prosecution history. Unique Concepts, Inc. v. Brown, 939 F.2d 1558, 1561 (Fed. Cir. 1991).

"[W]ords of a claim 'are generally given their ordinary and customary meaning.'" Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting Vitronics Corp. v.

⁸ In light of this finding, it is unnecessary to address Defendants' contentions regarding the "imaging device" construction.

Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” Id. at 1313.

In addition to the claim language itself, it is always necessary to review the specification in the patent because the “specification contains a written description of the invention which must be clear and complete enough to enable those of ordinary skill in the art to make and use it.” Vitronics Corp., 90 F.3d at 1582; see also 35 U.S.C. § 112, ¶ 1 (“The specification shall contain a written description of the invention . . . in . . . full, clear, concise, and exact terms.”). “In light of the statutory directive that the inventor provide a ‘full’ and ‘exact’ description of the claimed invention, the specification necessarily informs the proper construction of the claims.” Phillips, 415 F.3d at 1316. Thus, the specification is “‘highly relevant’” to the analysis, and many times will be “‘dispositive.’” Id. at 1315 (quoting Vitronics Corp., 90 F.3d at 1582).

In addition to this intrinsic evidence, extrinsic evidence, such as dictionaries, treatises, and expert testimony, may inform the court's claim construction analysis. Id. at 1317-18. Despite its utility, however, extrinsic evidence “is unlikely to result in a reliable interpretation of patent claim

scope unless considered in the context of the intrinsic evidence.” Id. at 1319. “The best source for understanding a technical term is the specification from which it arose, informed, as needed, by the prosecution history.” Multi-form Desiccants, Inc. v. Medzam, Ltd., 133 F.3d 1473, 1478 (Fed. Cir. 1998).

2. The Term “Image” Means the Actual-Printed Image Excluding Registration Marks

The Court agrees with Defendants that the term “image” in Claim 29 should be construed to mean the actual printed image (i.e., a scene or picture) excluding registration marks. (Defs.’ Proposed Findings of Fact, doc. no. 89, ¶ 147.)

Defendants highlight that the stated purpose of the ‘577 patent was to perform color registration without registration markers. They cite the “Background of the Investigation” section of the specification which states the primary goal of the patent is, “to provide a system which is able to provide color-to-color registration based only upon scanning the image being printed” [and not any] “registration mark distinct from the image being printed.” (‘577 patent specification at col.1, lines 36-45.) Thus, Defendants propose that the claim term “image” can only refer to a suitable area of the actual printed image or work (i.e. scene) to be printed. They claim that the “image” cannot include registration and reference marks printed outside of the boundaries of the actual printed

work, because that functionality is specifically excluded from the '577 Patent.

The Court credits the declaration and testimony of HW "Buck" Crowley, an electrical engineer in the printing industry who has patented numerous inventions and products in the printing industry. As used in the '577 patent and in Claim 29, one of ordinary skill in the art would understand the term "image" to mean a production image; that is, the actual image, such as the hand or flower depicted in Figure 2E of the '577 patent, but not registration marks of any kind. (Defs.' Proposed Findings of Fact, doc. no. 89, ¶ 138-140; Decl of HW Crowley, Appx. Ex. E.)

Moreover, the '577 Patent disavows the prior art's use of registration marks:

U.S. Pat. No. 4,887,530,⁹ issued to Jeffrey W. Sainio on Dec. 19, 1989, discloses a control system for adjusting the color-to-color registration of multi-color web-fed printing press system. In general, the device utilizes a registration mark distinct from the printed image to provide color-to-color registration. An optical scanner scans registration marks each associated with one color of the printed image. The optical scanner provides information to a control system which allows the control system to determine the spatial relationship of the registration marks and control the printing units of the printing press system such that registration of printed colors is corrected as necessary.

⁹ The '530 patent is a prior-art issued to Jeffrey W. Sainio that discloses a color registration system that operates with registration marks. The description of how the '530 patent operates with marks is similar to how most prior-art marked registrations systems work, including the mRC System. (Defs.' Ex. 34)

The system of U.S. Pat. No. 4,877,530 is reliable and has proved highly useful for maintaining color-to-color registration of multi-color prints. However, the requirement of a registration mark distinct from the image being printed requires additional paper which is discarded and adds cost to the printing process. Additionally, there are certain types of printed materials which do not provide a convenient area for applying registration marks. Accordingly, it would be advantageous to provide a system which is able to provide color-to-color registration based solely on the image being printed.

('577 Patent Specification 1:20-45.)

The Federal Circuit has held that if "the specification makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent, even though the language of the claims, read without reference to the specification, might be considered broad enough to encompass the feature in question." SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1341 (Fed. Cir. 2001). Moreover, the court has recently reiterated, "[w]here the general summary or description of the invention describes a feature of the invention . . . and criticizes other products . . . that lack that same feature, this operates as a clear disavowal of these other products. . . .'" Edward Lifesciences LLC v. Cook Inc., 582 F.3d 1322, 1333 (Fed. Cir. 2009) (citing Astrazeneca AB v. Mut. Pharm. Co., 384 F.3d 1333, 1340 (Fed. Cir. 2004) (finding disavowal of resilient wires in the "background art" section of specification)).

When read in light of the specification and Background

of the Invention section, Claim 29 covers a system that excludes any signals or data representative of registration marks. In the same breath, the specification praises the '530 patent as "reliable" and "highly useful" but then complains that the requirement of distinct registration marks requires additional discarded paper and adds cost. Moreover, the specification details that there are certain mediums that do not provide a convenient area for registration marks and where, theoretically, the '530 Patent method cannot operate.

Thus, the "Background of the Invention" section of the '577 Patent is clear that there are serious disadvantages of "registration marks" and that its one embodiment describes a system that bases its operation "upon an analysis of the color densities of a portion of a printed image, rather than registration marks or the dot locations of a printed image." (15:33-36.) Accordingly, the disavowal stems from the prior art's problematic use of registration marks distinct from the actual printed image or within the image, and the '577 Patent proposes to solve the problem. The preferred embodiment states that the invention solves all of the problems with prior-art. The disavowal and criticism of prior-art in this case is unmistakable. Consequently, this constitutes a legal disavowal of a registration system that operates within registration

marks.¹⁰ Where, "the specification may reveal an intentional

¹⁰ Quad/Tech argues there is no clear disavowal of markless registration control, but rather that the comments in the specification are directed to paper savings and merely point to why the markless functionality is the preferred embodiment. Quad/Tech relies primarily on two cases where the Federal Circuit discussed disavowal and found that "disparaging comments alone do not necessarily show a manifest or express disavowal of the criticized subject matter." Epistar Corp.v. Int'l Trade Com'n, 566 F.3d 1321, 1335-36 (Fed. Cir. 2009) (citing Ventana Med. Sys., Inc. v. Biogenex Labs., Inc., 473 F.3d 1173, 1180-81 (Fed. Cir. 2006)).

In Epistar, the court agreed with the ALJ that the background section only criticized the use of iridium-tin oxide ("ITO") as a front contact. Epistar, 566 F.3d at 1335. The court agreed with the ALJ that the disputed claim involved the use of ITO as a transparent window layer which "serves a distinct function in an LED [light emitting diode]." Id. For that reason, the court found that "this case does not present an instance where the inventor distinguishes an invention over prior art in an unmistakable disavowal of those prior art features." Id. at 1336. Here, no such distinction can be made. The '577 Patent describes several significant disadvantages from using the marked system. Quad/Tech now seeks to enjoin Defendants from selling a registration control system that operates solely with registration marks and cannot operate in markless mode.

In Ventana, the issue was the proper construction of the term "dispensing" in a patent claiming automated methods for staining microscope slides. Ventana, 473 F.3d at 1176. The district court construed "dispensing" to require "direct dispensing," because the embodiments in the specification involved direct dispensing. Id. at 1178. On appeal, the defendant argued that the specification, when read in its entirety, would lead to the "inescapable conclusion" that the heart of the invention involved "direct dispensing," and that the specification implicitly defined the term "dispensing" to mean "direct dispensing." The court disagreed, finding that the Background section of the patent in suit discussed different dispensing techniques, including a device that employed a "direct dispensing" technique. The court found that the defendant's argument could not be correct, because if it was, "the inventors have also disavowed coverage of 'direct dispensing,' which is the type of dispensing employed by the patent's preferred embodiment." Here, the '577 Patent does not reject a

disclaim, or disavowal, of claim scope by the inventor. . . the inventor has dictated the correct claim scope, and the inventor's intention, as expressed in the specification, is regarded as dispositive." Phillips, 415 F.3d at 1316 (citing SciMed Life, 242 F.2d at 1341, 1343-44.; Timken Co. v. SKF U.S.A., Inc., 193 F. Supp. 2d 813, 818 (E.D. Pa. 2002) (Robreno, J.) (granting defendant's motion for summary judgment and relying upon specification language in holding that patent was limited by disavowal in summary of the invention section).

Moreover, Quad/Tech's proposed construction ("the optical counterpart derived from a source" including "registration marks") contradicts the way the term "image" is

registration system that explicitly used registration marks. Thus, Ventana is distinguishable.

In the present case, the specification notes in the Background Section the benefits of a markless system and repeats its attributes. The inventors makes it clear that the attributes of the markless system are important in distinguishing the prior art. The prior art of the marked registration is clearly disparaged and disclaimed.

In sum, the Court finds that Epistar and Ventana are distinguishable because the present case involves much more than "general statements by the inventors indicating that the invention is intended to improve upon prior art . . ." Id. The present case is one like SafeTCare where the Court in construing the claims is "rely[ing] on the specification merely to understand what the patentee has claimed and disclaimed." SafeTCare Manufacturing, Inc. v. Tele-Made, Inc., 497 F.3d 1262, 1270 (Fed. Cir. 2007). The Court finds that the specification makes it clear that what was claimed was markless registration and what was disclaimed is the marked registration.

used in the '577 Patent, is broader than the '577 Patent, relies on extrinsic sources and conflicts with the '577 Patent creators own admissions. Importantly, the '577 Patent inventors have described the '577 Patent as a "markless registration control system." In a sworn declaration in U.S. Patent No. 6,792,240 ('240 Patent), which is owned by Quad/Tech and invented by Jeffery Sainio, John Seymour and Randall Freeman, describe the '577 patent: "The markless registration control system[] . . . described in U.S. Pat. No. [] 5,412,577 . . . use[s] the printed image itself as the source of registration." ('240 Patent specification 3:33-35.) Thus, Quad/tech and the patent inventors confirmed that the scope of the '577 Patent is a "markless registration control system."

In summary, after considering the relevant language of Claim 29, the ordinary and customary meaning of "image" and the written specification of the '577 Patent, the Court construes the term "image" in Claim 29 as: the actual printed image (i.e., a scene or picture) excluding registration marks.¹¹

3. Infringement Analysis

"Patent infringement occurs when a device . . . that is literally covered by the claims or is equivalent to the claimed subject matter, is made, used, or sold, without the authorization

¹¹ As described supra, the Court need not construe any of the remaining claims in Claim 29.

of the patent holder, during the term of the patent.” Multi-form Desiccants, Inc. v. Medzam, Ltd., 133 F.3d 1473, 1476 (Fed Cir. 1998). “Infringement requires that every limitation of a claim be met in the accused structure either exactly or by an equivalent.” Roton Barrier, Inc. v. Stanley Works, 79 F.3d 1112, 1125 (Fed. Cir. 1996). “[T]he issue of literal infringement may be resolved with the step of claim construction, for upon correct claim construction it may be apparent whether the accused device is within the claims.” Multi-form Desiccants, 133 F.3d at 1476.

In this matter, Quad/Tech has failed to demonstrate a reasonable likelihood of proving that the “image” element of Claim 29, when properly construed, is literally present in the mRC System. In other words, the mRC System does not literally use the printed image itself (excluding registration marks) as the source of the registration information. Accordingly, without literal infringement of Claim 29, Quad/Tech cannot prove a likelihood of success on the merits. See, e.g., Vehicular Tech. Corp. v. Titan Wheel Int’l, Inc., 141 F.3d 1084, 1092-93 (Fed. Cir. 1998) (finding that where one key function within the accused device differs from the patent at issue, a preliminary injunction should not issue). See Novo Nordisk v. Sanofi-Aventis U.S. LLC., No. 07-3206, 2008 U.S. Dist. LEXIS 12342, at *44-49 (D.N.J. Feb. 19, 2008), aff’d, 290 Fed. Appx. 334 (Fed. Cir. 2008) (preliminary injunction “not appropriate” where defendant

raised substantial questions whether specification of patent read as a whole suggested requirement of direct gearing and non-rotatable piston rod); see also Gen. Automatics Diazyme Labs. Division v. Axis-Shielf, No. 2007-1349, 2008 U.S. App. LEXIS 10235, at *10-11 (Fed. Cir. May 12, 2008) (noting that the plaintiff failed to prove infringement for method of analyzing chemicals in human blood because every claim limitation failed to cover specific chemical used in method accused of infringement).

Quad/Tech also argues that the Court should "adopt Q.I.'s acceptance of the judgment in Germany as an admission of infringement of a virtually identical claim." Plaintiff argues that Claim 1 of the German Patent is "virtually identical" to Claim 29 of the '577 Patent (Pl.'s Mot. at 16-17). Quad/Tech cites the Tate Access case for the proposition that prior litigation is a factor the Court may consider in connection with considering the validity of the '577 Patent. Tate Access Floors, Inc. v. Interface Architectural Resources, Inc., 279 F.3d 1357, 1362 (Fed. Cir. 2002) (citing prior litigation, of the same plaintiff where the Federal Circuit previously upheld a jury verdict affirming patent infringement, as an important consideration in the opinion).

Quad/Tech has failed to provide adequate evidence of

the German judgment it purports to rely on.¹² Moreover, foreign patent determinations are not binding in litigation concerning United States patents and patent law. See, e.g., Medtronic, Inc. v. Daig Corp., 789 F.2d 903, 907-908 (Fed. Cir. 1986) ("As a final effort to prove obviousness of the [invention], [defendant] urges this court to adopt the conclusion of a German tribunal holding [the invention's] German counterpart patent obvious. This argument is specious. The patent laws of the United States are the laws governing a determination of obvious/nonobviousness of a United States patent in federal courts."); Allen v. Howmedia Leibinger, Inc., 197 F. Supp. 2d 101, 110 (D. Del. 2002) (noting that the Federal Circuit has "specifically rejected as 'specious' the argument that a United States court should adopt the conclusion of a foreign tribunal"); Oki Am v. Advanced Micro Devices, Inc., No. 04-03171, 2006 WL 3290577, at *8 n.2 (N.D. Cal. Nov. 13, 2006) (holding that "the action taken by the European Patent Office rejecting counterpart application over the same reference is neither controlling nor persuasive."). Thus, the German decision has no application in this Court and is not entitled to any deference.

¹² Quad/Tech, when arguing the weight of the German judgment, relies entirely on Randall Freeman's (Quad/Tech's Vice President and General Manager of packaging) affidavit that describes the German judgment. (Pl.'s Proposed Findings of Fact at ¶¶ 39-53.) Quad/Tech offers no other analysis of the German judgment or comparison between the two patents.

Based on the '577 Patent's disavowal of marked registration systems, the Court finds that the mRC system does not literally infringe Claim 29 of the '577 Patent.

4. Irreparable Harm

Because Quad/Tech has not shown a reasonable likelihood of proving patent infringement, it is not entitled to a presumption of irreparable harm. See Eli Lilly & Co. v. Am. Cyanamid Co., 82 F.3d 1568, 1578 (Fed. Cir. 1996). Nor does the evidence suggest the existence of irreparable harm.

In order to make this showing, the movant must clearly show "immediate irreparable harm," rather than a risk of harm. Campbell Soup Co. v. ConAgra, Inc., 977 F.2d 86, 92 (3d Cir. 1992). Examples of harm from patent infringement that may not be compensable by money damages (and therefore necessitate a preliminary injunction) include: potential price erosion; loss of market share and the resulting difficulty in determining money damages; loss of good will; work force reductions; and disruption of ongoing research and development. Sanofi-Synthelabo, 370 F.3d at 1383.

Quad/Tech argues that the infringing activities result in lost market share and upset customer relationships that will be difficult to repair. (Pl.'s Mot. at 32-39; Decl. of R. Freeman at ¶¶ 24, 41.) Quad/Tech claims Defendants are wrongfully disseminating the notion that Q.I. is the originator of the

printing technology and misleading customers through advertising and press releases. Plaintiff notes that Defendants are a direct competitor of Quad/Tech and, consequently, are using appropriated technology to steal market share from the Plaintiff. Finally, Quad/Tech notes that they will suffer additional irreparable harm because Q.I.'s infringement hinders its ability to sell all of its products. It explains that customers for print control systems prefer to have a single source of supply for auxiliary control systems and the alleged patent infringement leads to more lost business.

Defendants respond that Quad/Tech has not implemented the '577 Patent in any product it currently sells, so it cannot prove a direct nexus between any alleged loss of sales and the mRC System with respect to the '577 Patent. Defendants contend that because Plaintiff has not practiced the patent over the last 14 years, its non-use of the patent should weigh against a finding of irreparable harm. When a patentee does not practice the invention or otherwise commercially exploit it, irreparable harm is more difficult to demonstrate. High Tech. Med Instr., Inc., v. New Image Indus., Inc., 49 F.3d 1551, 1556 (Fed. Cir. 1995) ("Although a patentee's failure to practice an invention does not necessarily defeat the patentee's claim of irreparable harm, the lack of commercial activity by the patentee is a significant factor in the calculus.").

Moreover, Defendants argue that potential lost sales alone do not necessarily demonstrate irreparable harm. "There is no presumption that money damages will be inadequate in connection with a motion for an injunction pendente lite." Nutrition 21 v. United States, 930 F.2d 867, 872 (Fed. Cir. 1991). Rather, Defendants argue that lost market share may be repaired by money damages and there is no need for an injunction. However, Defendants note that Quad/Tech has not alleged actual lost sales or lost market share but only references "future" damages. Defendants note that Plaintiff has not produced any evidence of a prior working relationship with any of the companies from which Defendants secured contracts, but Plaintiff only speculates as to hypothetical lost profits.

Defendants additionally argue that Plaintiff unduly delayed seeking injunctive relief after first learning of the alleged infringement. Arguments of irreparable harm may be rebutted by a showing that the patent holder delayed in bring its infringement actions. See Pfizer, Inc. v. Teva Pharmaceuticals, USA, Inc., 429 F.3d 1364, 1381 (Fed. Cir. 2005); but see High Tech., 49 F.3d 1551 ("[T]he period of delay may not have been enough, standing alone, to demonstrate the absence of irreparable harm.").

Several factors weigh against Quad/Tech's assertion of irreparable harm. First, Quad/Tech has failed to carry the

burden of articulating why monetary damages would not remedy its prospective injury. No evidence has been submitted to show why Plaintiff could not be compensated financially for the alleged infringements as measured by lost sales and/or profits. Second, Quad/Tech's non-use of the patent is an important consideration against a finding of irreparable harm.

Third, Quad/Tech has provided no concrete evidence to prove irreparable harm. Quad/Tech's sole evidence comes from the declarations of Randall Freeman. Freeman speculates that customers will associate Defendants as the inventors of markless technology and the printing industry's alleged perception of Quad/Tech as the innovative leader will erode. (Pl.'s Proposed Findings of Facts at ¶¶ 167-68.) Freeman also claims that Quad/Tech faces lost market share relating to register control products, but also other related products such as color control and ribbon cut off control. (Id. at ¶ 170.) He claims that Defendants' actions have caused harm to Quad/Tech's ability to sell its products. However, Freeman's statements are conclusory, speculative and unsupported by any other evidence. See Ill. Tool Works, Inc. v. Grip-Pak, 906 F.2d 679, 683 (Fed. Cir. 1990) (holding that accepting speculative claim of damages "would require a finding of irreparable harm to every manufacturer/patentee, regardless of circumstances"); Voile Mfg. Corp., 551 F. Supp. 2d at 1037 ("Mr. Dandurand's conclusory

affidavit is not enough to demonstrate irreparable harm here. Courts require more than unsupported factual conclusions to support such a finding.”).

Quad/Tech fails to cite a single transaction in which it lost customers or potential customers because Defendants allegedly sold or offered markless registration control technology. Accordingly, Quad/Tech has failed to prove a causal relation between alleged loss and alleged infringement, which is necessary to prove irreparable harm, and it failed to prove lost sales arising from the Defendants' alleged sale of a markless registration control system.

Moreover, there seems to be at least a 14-month delay between the discovery of the alleged infringement and the Plaintiff filing for injunctive relief. Plaintiff alleges it learned that Defendants were offering its mRC System for sale in May 2008. The request for preliminary injunction in the instant action was filed in July 2009. (Pl.'s Mot. at 12.) This undercuts the urgency that forms the cornerstone of injunctive relief; indeed, this delay indicates a lack of urgency. See Hybritech Inc. v. Abbott Lab., 849 F.2d 1446, 1457 (Fed. Cir. 1988) (period of delay may be a significant factor in irreparable harm analysis); T.J. Smith & Nephew Ltd. v. Consolidated Med. Equip., Inc., 821 F.2d 646, 648 (Fed. Cir. 1987) (15-month delay by patentee suggests no irreparable harm).

In view of the delay in seeking extraordinary injunctive relief, the absence of any evidence of lost sales or business and the lack of probative evidence of Defendants' inability to satisfy a monetary judgment, a finding of irreparable harm is not indicated here. See Laminations, Inc. v. Roma Direct Mktg. LLC, 516 F. Supp. 2d 404, 419 (M.D. Pa. 2007) For this reason, as well, Quad/Tech is not entitled to a preliminary injunction.

Because Quad Tech has failed to demonstrate a reasonable likelihood of success on the merits or that it will suffer irreparable harm if an injunction does not issue, there is no need to consider the other two factors of the preliminary injunction analysis. See Reebok Int'l, Ltd. v. J. Baker, Inc., 32 F.3d 1552, 1556 (Fed. Cir. 1994). It should be noted, however, that the balance of harms militates against preliminary injunctive relief. Defendants averred credibly that a preliminary injunction would close their United States business. (Defs.' Proposed Findings of Fact at ¶¶ 213-216.) By way of contrast, Quad/Tech is a large company with many printing products available, and it has not shown that denial of the preliminary injunction will cause it substantial injury.

IV. CONCLUSION

To prevail on a motion for preliminary injunction in a

patent infringement lawsuit, the moving party must show a reasonable likelihood that, at trial, it will prove by a preponderance of the evidence that the defendant's product infringes each and every element of its asserted claim. Quad Tech has failed to carry its burden. Moreover, absent a presumption of irreparable harm that applies where a reasonable likelihood of prevailing is shown, the evidence in this case does not support a finding of irreparable harm. Accordingly, Quad Tech's Motion for Preliminary Injunction will be denied. An appropriate Order follows.
